



## Monitoring Polymerization Reactions: from Fundamentals to Applications (Hardback)

By Wayne F. Reed, Alina M. Alb

John Wiley and Sons Ltd, United States, 2014. Hardback. Condition: New. New. Language: English . Brand New Book. Offers new strategies to optimize polymer reactions With contributions from leading macromolecular scientists and engineers, this book provides a practical guide to polymerization monitoring. It enables laboratory researchers to optimize polymer reactions by providing them with a better understanding of the underlying reaction kinetics and mechanisms. Moreover, it opens the door to improved industrial-scale reactions, including enhanced product quality and reduced harmful emissions. Monitoring Polymerization Reactions begins with a review of the basic elements of polymer reactions and their kinetics, including an overview of stimuli-responsive polymers. Next, it explains why certain polymer and reaction characteristics need to be monitored. The book then explores a variety of practical topics, including: \* Principles and applications of important polymer characterization tools, such as light scattering, gel permeation chromatography, calorimetry, rheology, and spectroscopy \* Automatic continuous online monitoring of polymerization (ACOMP) reactions, a flexible platform that enables characterization tools to be employed simultaneously during reactions in order to obtain a complete record of multiple reaction features \* Modeling of polymerization reactions and numerical approaches \* Applications that optimize the manufacture of industrially important polymers Throughout the...



**READ ONLINE**

[ 5.85 MB ]

### Reviews

*These kinds of pdf is every thing and helped me searching ahead and much more. It generally does not expense an excessive amount of. You wont sense monotony at at any time of your time (that's what catalogs are for regarding should you question me).*

-- **Prof. Angelo Graham**

*The ebook is easy in read through preferable to understand. It is actually writter in straightforward words and never hard to understand. I realized this publication from my dad and i encouraged this ebook to understand.*

-- **Dr. Fausto Jenkins Sr.**